

# NAVAL METEOROLOGY AND OCEANOGRAPHY AVIATION OPERATIONS

PROVIDING AN ASYMMETRIC WARFIGHTING ADVANTAGE



**Aviation Operations:** A key task of the Naval Meteorology and Oceanography Command is to support Naval aviation around the world, with a particular emphasis on mission accomplishment and safety of flight. Meteorologists analyze current environmental conditions and computer models to provide forecasts that enable safe flight operations, provide optimum flight routing, and meet tactical objectives 24 hours a day, 7 days a week. These forecasts are essential to protect lives and property of the Navy and Department of Defense and result in mission accomplishment for the "warfighter." An accurate forecast is often the critical factor in mission success. Routine weather conditions such as cloud cover, dust, and precipitation often have major impacts on the type, effectiveness, and delivery tactics for many of today's sophisticated weapons.

**Personnel.** Highly trained meteorologists assigned to globally dispersed activities provide:

- Flight Weather Briefings (DD 175-1).
- Horizontal Weather Depictions (HWD)
- Local area and point weather warnings for Navy airfields.
- Terminal Aerodrome Forecasts (TAF) disseminated every 6 hours.
- In-theater analysis, forecasts, advisories for aircraft.

**Aviation Systems.** Several of the state of the art systems used include:

- Optimum Path Aircraft Routing System (OPARS). A computerized flight planning system for determining the most fuel-efficient altitude and flight path that saves millions of dollars a year on fuel costs.
- Leading Environmental Analysis and Display System (LEADS) and Navy Integrated Tactical Environmental Subsystem (NITES) Aviation Forecasting Systems. Primary display, analysis, and production systems used by our forecasters.
- Automated Surface Observing System (ASOS) and Remote Automated Weather System (RAWS). Primary airfield environmental observing systems.
- Naval Flight Weather Briefer (NFWB). An automated web-based system used to request, produce and disseminate flight weather briefings.

**Environmental Factors.** Many environmental conditions severely impact flight operations, and mission accomplishment on a daily basis. These include: wind speed and direction, cloud ceiling, precipitation, turbulence, visibility, icing, sea height, lightning, and severe weather. An accurate forecast is often the deciding factor in mission success and for the safety of the pilot and his aircraft.

**For more information:** CNMOC Public Affairs, 228-688-4188 or [pao@cnmoc.navy.mil](mailto:pao@cnmoc.navy.mil).

